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Fact Sheet

Education Indicators in Canada

Educational Attainment and Employment: Canada in an International Context

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Educational Attainment and Employment: Canada in an International Context

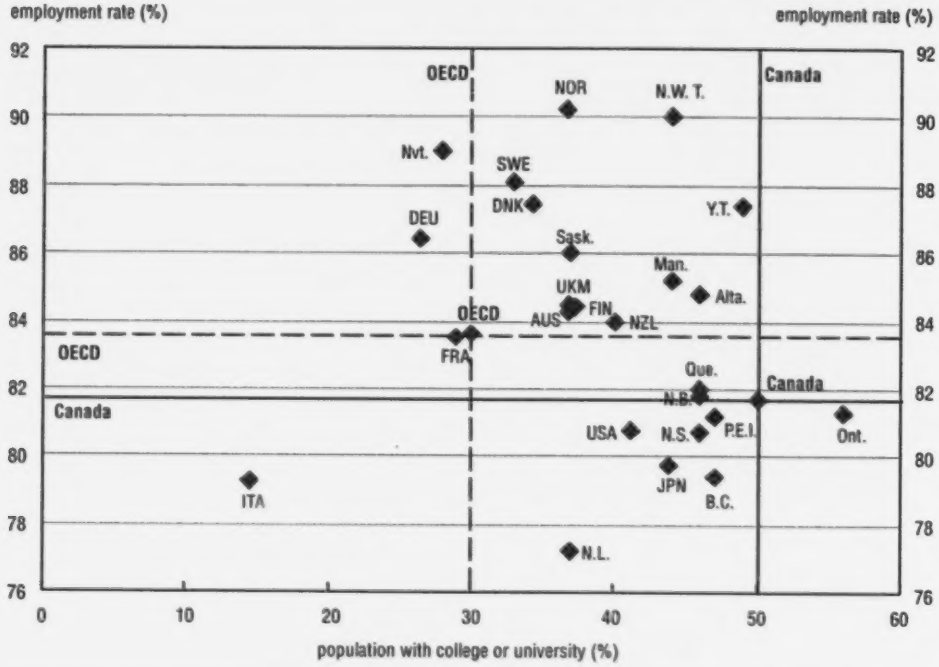
College and university education (referred to as tertiary education in the international context) is typically seen as an investment that will lead to future benefits for both the individual and society. One of these benefits is increased employability. In Canada and across the other member countries of the Organisation for Economic Co-operation and Development (OECD), higher levels of education are typically associated with higher employment rates. In Canada in 2009, 82% of the adult population aged 25 to 64 with a tertiary education were employed, compared with 55% of this age group with less than high school education (Charts 1 and 3). In Canada, the employment rate of the adult population with tertiary education was just slightly below the average recently reported for OECD countries as a whole (84%) (Chart 1).[1]

The employment rate of the population aged 25 to 64 provides some information on the capacity of the economy to tap into or utilize the skills offered by this group. This fact sheet uses information from the OECD report cited above as a springboard for a description of educational attainment and employment rates in Canada and its provinces and territories.[2] The aim is to develop a better picture of employment and educational attainment in Canada by disaggregating overall employment rates across Canada to focus on the employment levels of those with tertiary education compared with the rates for those with less than high school education. It must be kept in mind that employment in Canada and in other countries is influenced by a variety of factors other than the supply and demand for labour, such as the institutional context (e.g., unionization), the balance between various sectors of the economy, and government policies. Furthermore, employment rates do not provide information on the type or quality of jobs held. The data for Canada presented in this fact sheet are from Statistics Canada's Labour Force Survey (LFS).

1. See Indicator A7 in *Education at a Glance 2011: OECD Indicators* (referred to as *EAG 2011* in this fact sheet).
2. References made to data on educational attainment in OECD countries are from Table A1.3a in *EAG 2011*. Data on employment rates in OECD countries are from Tables A7.1b (available on line only) and A7.3a in *EAG 2011*.

Chart 1

Population aged 25 to 64 with college or university education and their employment rate, Canada,[1] provinces and territories, and selected OECD countries, 2009



1. These Labour Force Survey (LFS) estimates for Canada were derived using the results of the LFS in the provinces. The calculation of the Canada-level average does not include the territories.

Note: The International Standard Classification of Education (ISCED) system was used to classify educational attainment, which reflects the highest level of education successfully completed. "Tertiary education" is captured here; in Canada, this is the equivalent of college and university education (ISCED 5B, 5A/6).

Sources: Organisation for Economic Co-operation and Development (OECD), *Education at a Glance 2011: OECD Indicators*, Tables A7.3a and A1.3a; Statistics Canada, *Education Indicators in Canada: An International Perspective 2011*, Tables A.1.3 and A.5.2.

Between 1999 and 2009, the proportion of adults aged 25 to 64 with tertiary education in Canada increased from 39% to 50%. In 2009, Canada had the highest proportion of the adult population with tertiary education among all reporting member countries of the OECD. By comparison, the 2009 OECD average was 30%.[3]

3. In international comparisons of education, based on the International Standard Classification of Education (ISCED), tertiary education consists of three categories of postsecondary attainment in Canada: (1) non-university certificates or diplomas from community colleges, CEGEPs or schools of nursing, and university certificates below bachelor's degree; (2) bachelor and master's degrees and other university degrees or certificates above a bachelor's degree (but below a doctorate); and (3) doctorates and postdoctoral programs. Some limitations are encountered in Canada when using Labour Force Survey (LFS) data to examine and categorize educational attainment using the ISCED classification system. LFS data reported for the Canadian population that has attained tertiary-level college credentials will be somewhat overestimated in international comparisons because this category includes, for example, some CEGEP graduates or college-university transfer program completers who, under the international classification standards, would have been placed in the postsecondary non-tertiary category.

The employment rate for Canadians with tertiary education was the same in 1999 as in 2009, and throughout this 10-year period it did not fluctuate by more than 1 percentage point. This stable employment rate in relation to large increases in the number of individuals with a college or university education indicates that the labour market in Canada was successful in employing a growing number of highly educated individuals. By comparison, since 2004, the employment rates for this education group have been fairly similar in Canada and the United States, although the United States has posted larger decreases since 2008, coinciding with the onset of the country's economic downturn.

In 2009, the employment rate in Canada for adults with less than high school completion was 55%. The employment rate for this education group increased from 54% in 1999 to a peak of 58% in 2008 before falling by 3 percentage points in 2009. Adults with less than high school completion were more affected by the less favourable market conditions in 2009 than those with tertiary education.[4] The changes in the employment rate for those with less than high school completion occurred while the percentage of adults with this level of education in Canada decreased from 20% to 12%.

Employment rates in Canada for individuals with a college or university credential were consistently within 3 percentage points of the OECD average between 1999 and 2009. In 2009, however, many OECD countries posted higher employment rates for their tertiary-educated populations than did Canada. Among the 12 peer countries considered in this paper,[5] all but 3 (the United States, Japan and Italy) posted higher employment rates than Canada. In all 12 countries, the proportions of the population with tertiary education credentials were lower than the proportion for Canada (Chart 1, refer to percentage of population with college or university).

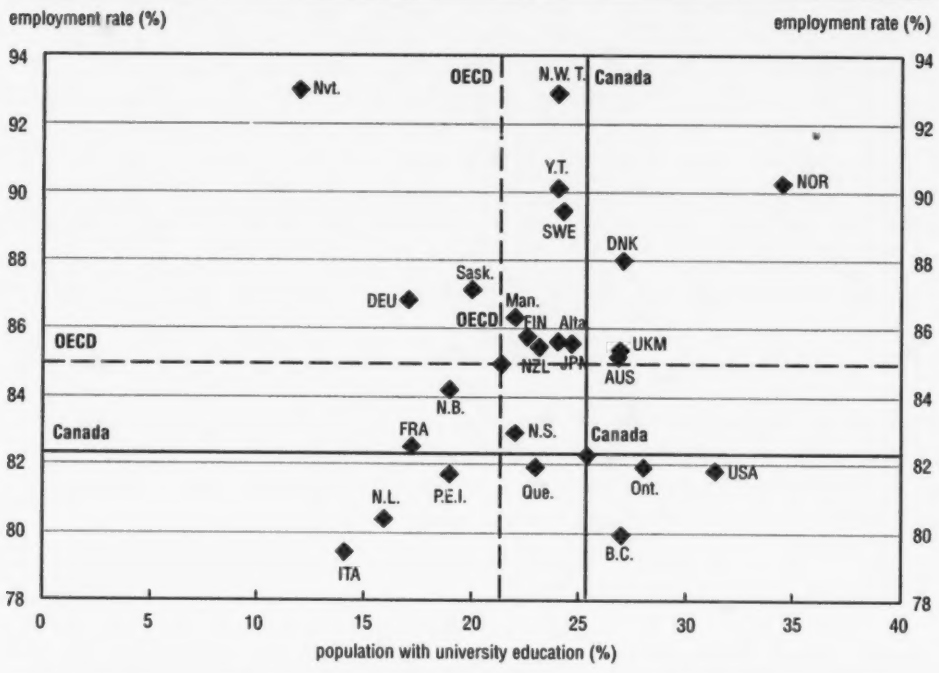
When educational attainment for the population with a university degree (bachelor's, master's or PhD) is examined separately, in 2009, one-quarter (25%) of individuals aged 25 to 64 in Canada had attained this level of education, compared with just over one-fifth (21%) in OECD countries on average (Chart 2). Unlike the situation at the overall tertiary level, several of the peer countries had higher proportions of individuals with a university degree than did Canada, such as Australia (27%), the United Kingdom (27%), Denmark (27%), the United States (31%), and Norway (34%). In terms of employment rates for this education group, 82% of individuals with a university degree were employed in Canada in 2009. This rate was higher than the overall employment rate in Canada of 75% and fairly similar to that for individuals with a college (ISCED 5B) credential, 81%.[6] The employment rate for the university educated in Canada was lower than the average among OECD countries (85%), while Canada posted similar employment rates to the OECD average for individuals with a college credential. Most peer countries with similar or higher university attainment rates had higher employment rates than Canada (Chart 2). The highest employment rates for the university-educated were observed in the Scandinavian countries of

4. See also Statistics Canada and the Council of Ministers of Education, Canada (CMEC), *Education Indicators in Canada: An International Perspective 2011*, Indicator A5.
5. The 12 countries presented in this fact sheet were selected as they were deemed to be among Canada's social and economic peers and therefore of key comparative interest.
6. Statistics Canada and the Council of Ministers of Education, Canada (CMEC), *Education Indicators in Canada: An International Perspective 2011*, Table A.5.1.

Denmark, Sweden, and Norway, where between 88% and 90% of them were employed. In these three countries, the employment rates for the university educated were 8 or 9 percentage points higher than the respective overall employment rate in each country. In Canada, this difference was 7 percentage points.

Chart 2

Population aged 25 to 64 with university education and their employment rate, Canada,[1] provinces and territories, and selected OECD countries, 2009



1. These Labour Force Survey (LFS) estimates for Canada were derived using the results of the LFS in the provinces. The calculation of the Canada-level average does not include the territories.

Note: The International Standard Classification of Education (ISCED) system was used to classify educational attainment, which reflects the highest level of education successfully completed (ISCED 5A/6).

Sources: Organisation for Economic Co-operation and Development (OECD), *Education at a Glance 2011: OECD Indicators*, Tables A7.1b (available on line only) and A1.3a; Statistics Canada, *Education Indicators in Canada: An International Perspective 2011*, Tables A.1.1 and A.5.1.

There are regional patterns in educational attainment and employment rates within Canada. With 56% of its population holding a college or university credential, Ontario was the leader in terms of tertiary attainment among the provinces and territories, as well as in comparison with the 12 OECD countries examined in this report (Chart 1). The employment rate for this group (81%) was similar to the Canadian average. By contrast, Newfoundland and Labrador had the lowest proportion of individuals aged 25 to 64 with a college or university credential in Canada (37%)—this was still above the average for OECD countries—and the lowest employment rate in Canada, at 77%. Nevertheless, this rate was much higher than the overall

employment rate (63%) in that province.[7] The attainment of tertiary education in most of the other provinces fell between the OECD and Canada averages. Employment rates for those with a tertiary credential were higher than the Canada average in Manitoba (85%), Alberta (85%), Saskatchewan (86%) and the territories.

The economies of the three provinces of Alberta, Manitoba and Saskatchewan were successful in generating high levels of employment for both the most and the least educated, in this case those with university credentials and those with less than high school. While somewhat lower proportions of the population in Manitoba, Saskatchewan and Alberta had a university education compared with the overall population in Canada, the employment rates for this education group were relatively higher in these three provinces: 86% in Manitoba and Alberta, and 87% in Saskatchewan (Chart 2). Similarly, the employment rates for the least educated (those with less than a high school education), were higher in these three provinces compared with both the OECD (56%) and Canada (55%) averages and among the highest of the countries examined in this report (Chart 3). In Manitoba, Alberta and Saskatchewan, between 63% and 67% of the population with less than a high school education was employed in 2009 (Chart 3). Among the OECD countries examined, those that also showed the ability to employ high proportions of the most and least educated included Australia, New Zealand, and the Scandinavian countries.

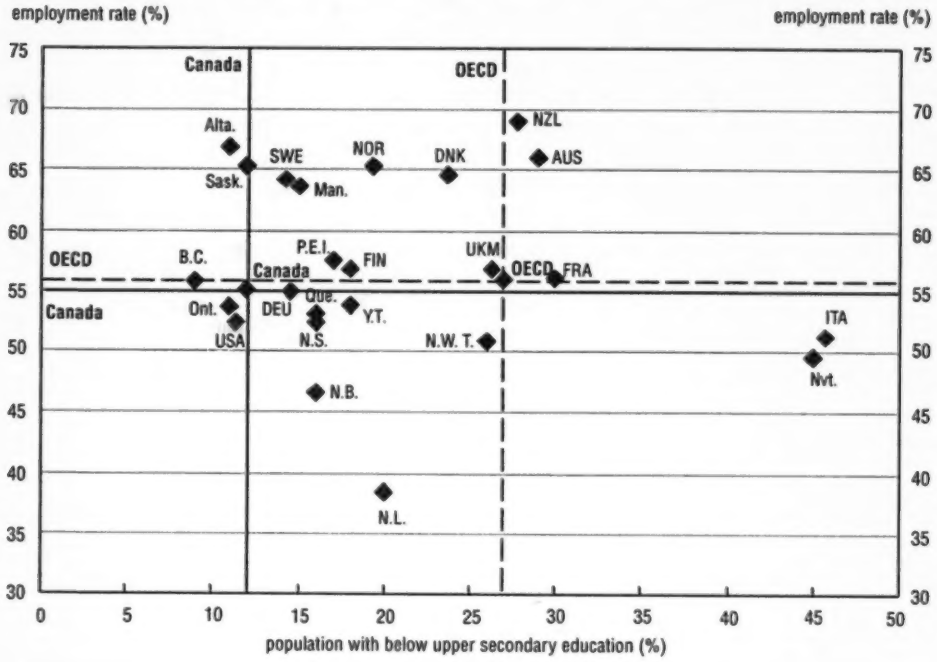
Newfoundland and Labrador and British Columbia had the lowest employment rates for the university educated (and for those with less than high school education in the case of Newfoundland and Labrador) among the provinces and territories and among the OECD countries with the exception of Italy (Charts 2 and 3). While the employment rate for the university educated was higher than the overall employment rate in both these provinces, the difference was much higher in Newfoundland and Labrador, 18 percentage points, compared with a 5-percentage-point difference in British Columbia.

Although not a focus of this fact sheet, it is noteworthy that the lower average employment rate in Canada in 2009 for the tertiary educated compared with the OECD average was mainly attributable to the employment pattern for men (at 85%, close to 4 percentage points below the OECD average).[8] The employment rate for tertiary-educated women in Canada (79%) was on par with the OECD average. A similar pattern was also observed among those with less than high school completion. The employment rate for men with this level of education in Canada was 63% in 2009 compared with 67% for their peers in OECD countries on average, whereas these rates were similar for women with less than high school completion (45% in Canada compared with 46% in OECD countries on average). In the countries included in this report, men had higher employment rates than women among both the more and less educated.

7. Statistics Canada and the Council of Ministers of Education, Canada (CMEC), *Education Indicators in Canada: An International Perspective 2011*, Table A.5.1.
8. The data on employment rates by gender in OECD countries are from *EAG 2011* Tables A7.3b and A7.3c (available on line only).

Chart 3

Population aged 25 to 64 with below upper secondary education and their employment rate, Canada,[1] provinces and territories, and selected OECD countries, 2009



1. These Labour Force Survey (LFS) estimates for Canada were derived using the results of the LFS in the provinces. The calculation of the Canada level average does not include the territories.

Note: The International Standard Classification of Education (ISCED) system was used to classify educational attainment, which reflects the highest level of education successfully completed (ISCED 2).

Sources: Organisation for Economic Co-operation and Development (OECD), *Education at a Glance 2011: OECD Indicators*, Tables A7.3a and A1.4; Statistics Canada, *Education Indicators in Canada: An International Perspective 2011*, Tables A.1.4 and A.5.2.

Conclusion

Between 1999 and 2009, the labour market in Canada was successfully employing growing numbers of highly educated individuals. In 2009, 82% of the population in Canada with a college or university credential was employed, compared with 55% of people with less than high school education. However, international comparisons indicate that most of the key comparable OECD countries that are included in this fact sheet are somewhat more successful than Canada in employing a higher proportion of individuals with a tertiary education, particularly among those with university credentials. This merits some more analysis to uncover the factors correlated with the lower utilization of skills in the Canadian economy. The provincial and territorial analysis shows that this is not a situation shared evenly throughout the country as the economies of the Prairie provinces (Manitoba, Saskatchewan and Alberta) appeared to be as successful as several OECD countries in providing employment for the highly educated—and, in their case, it is not at the expense of lower employment opportunities for the less educated—in fact, just the opposite.

About the data

This fact sheet uses data for Canada from the Labour Force Survey as produced by Statistics Canada for inclusion in the report of the Organisation for Economic Co-operation and Development (OECD) *Education at a Glance 2011: OECD Indicators*, and for inclusion in the companion report produced by Statistics Canada and the Council of Ministers of Education, Canada (CMEC), *Education Indicators in Canada: An International Perspective. Education Indicators in Canada: An International Perspective* is intended to facilitate the comparison of educational systems in Canada's provinces and territories with those of countries that belong to the OECD.

Educational attainment reflects the highest level of education successfully completed, based on the International Standard Classification of Education (ISCED) categories. For brief descriptions of the ISCED categories, see the "ISCED classifications and descriptions" section in the report *Education Indicators in Canada: An International Perspective 2011*.

The employment rate represents the percentage of employed people in the population aged 25 to 64. To calculate the employment rate for a group with a particular level of educational attainment, the number of employed persons is divided by the total number of persons in the population aged 25 to 64 who have attained the education level and then multiplying this quotient by 100.

As stated in the OECD's 2011 report, the OECD average is calculated as the unweighted mean of the data values of all OECD countries for which data are available or can be estimated. It does not take into account the absolute size of the education system in each country.

Abbreviations used in this Fact Sheet

Canada		Selected OECD countries	
Newfoundland and Labrador	N.L.	France	FRA
Prince Edward Island	P.E.I.	Germany	DEU
Nova Scotia	N.S.	Italy	ITA
New Brunswick	N.B.	Japan	JPN
Quebec	Que.	United Kingdom	UKM
Ontario	Ont.	United States	USA
Manitoba	Man.	Australia	AUS
Saskatchewan	Sask.	Denmark	DNK
Alberta	Alta.	Finland	FIN
British Columbia	B.C.	New Zealand	NZL
Yukon	Y.T.	Norway	NOR
Northwest Territories	N.W. T.	Sweden	SWE
Nunavut	Nvt.		

Acknowledgements

We would like to acknowledge the work of the Pan-Canadian Education Indicators Program (PCEIP) team at Statistics Canada and the Council of Ministers of Education, Canada (CMEC) Secretariat, as well as the assistance of the provincial-territorial members of the Strategic Management Committee of the Canadian Education Statistics Council in reviewing all the material.

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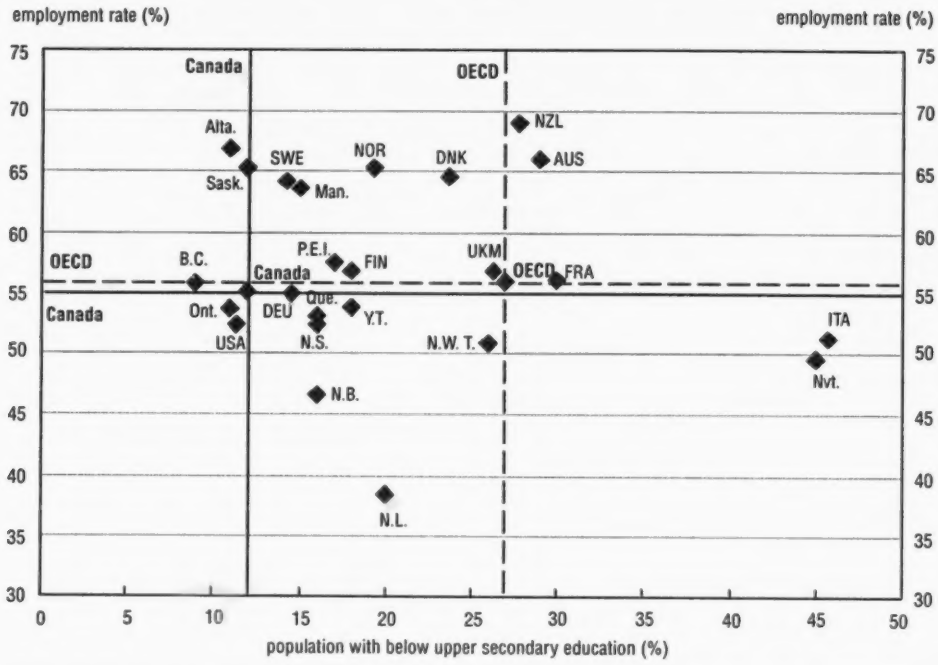

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Quebec	Que.	United Kingdom	UKM
Ontario	Ont.	United States	USA
Manitoba	Man.	Australia	AUS
Saskatchewan	Sask.	Denmark	DNK
Alberta	Alta.	Finland	FIN
British Columbia	B.C.	New Zealand	NZL
Yukon	Y.T.	Norway	NOR
Northwest Territories	N.W. T.	Sweden	SWE
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